## **CLAIMS**

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1	1.	A method for the propagation of and aeroponic growing of plants comprising
2		transplanting a living plant into a vessel of polymer foam having at least
3		one cavity distal to said plant;
4		applying water to said foam sufficient to saturate said foam, whereby
5		roots of said plant extend into and grow within said cavity.
1	2.	A method as set forth in claim 1, wherein said vessel comprises
2		a foam core, defining an upper surface, a base and a sidewall, said at
3		least one first cavity provided in said foam core, proximal to said base;
4		a first passageway extending through said foam core and into said first
5		cavity.
1	3.	A method as set forth in claim 2, wherein said step of applying water includes
2		the step of
3		directing water into said first passageway.
1	4.	A method as set forth in claim 1, the including the step of adding water to
2		said foam core.
1	5.	A method as set forth in claim 2, wherein said vessel further comprises
2		at least one second cavity in said upper surface, said first passageway
3		extending through said foam core communicating between said first and
4		second cavities;
5		an external flange proximal to said upper surface;
6		a peripheral trough between said upper surface and said external flange;
7		at least one bore passing through said foam core, providing a
8		communication between said trough and said first cavity whereby the
9		addition of water to said trough will fill said first cavity at least partially and
10		wet said foam core.

- 1 6. A method as set forth in claim 5, wherein said step of applying water includes 2 the step of 3 directing water into said second cavity. A method as set forth in claim 5, including the step of adding water into said 1 7. 2 trough. A vessel for the propagation of and aeroponic growing of plants comprising: 1 8. 2 a foam core, defining an upper surface, a base and a sidewall; 3 a waterproof outer coating at least partially covering said foam core; at least one first cavity in said core, proximal to said base; 4 at least one second cavity in said upper surface; 5 a first passageway extending through said foam core communicating 6 7 between said first and second cavities; 8 an external flange proximal to said upper surface; a peripheral trough between said upper surface and said external flange; 9 at least one bore passing through said foam core, providing a 10 communication between said trough and said first cavity whereby the 11 addition of water to said trough will fill said first cavity at least partially and 12 13 wet said foam core. A vessel, as set forth in claim 8, wherein said first cavity has a height of from 1 9. about one-quarter to one-half the length of said foam core and a width or 2 from about one-fourth to about three-quarters the width of said foam core. 3 10. A vessel, as set forth in claim 8, wherein said first cavity has a height of from 1 about 4 inches (10 cm) to about 12 inches (30.5 cm) and a width of from 2 3 about 4 inches (10 cm) to about 12 inches (30.5 cm).
  - A vessel, as set forth in claim 8, wherein said second cavity is dimensioned to
     fit the root ball of a plant transplanted therein.

- 12. A vessel, as set forth in claim 8, wherein said foam core is selected from the 1 2 group consisting of hydrophilic polymer foams. 1 13. A vessel, as set forth in claim 8, wherein said coating is selected from the 2 group consisting of epoxies, polyurethanes and phenolic resins. 14. In combination, a growing plant and a vessel for the propagation of and 1 2 aeroponic growing thereof comprising: 3 a foam core, defining an upper surface, a base and a sidewall; a waterproof outer coating at least partially covering said foam core; 4 at least one first cavity in said core, proximal to said base; 5 a first passageway extending through said foam core communicating 6 7 between said upper surface and said first cavity; 8 whereby the addition of water to said vessel will fill said first cavity at least partially and wet said foam core, propagating the growth of said plant, 9 including the extension of the roots of said plant into said passageway and 10 11 said first cavity. 15. The combination, as set forth in claim 14, wherein said vessel further 1 comprises 2 at least one second cavity in said upper surface; 3 said first passageway extending through said foam core communicating 4 between said first and second cavities; 5 6 an external flange proximal to said upper surface; a peripheral trough between said upper surface and said external flange; 7 at least one bore passing through said foam core, providing a 8 9 communication between said trough and said first cavity whereby the addition of water to said trough will fill said first cavity at least partially and 10 11 wet said foam core.
  - 16. The combination, as set forth in claim 14, wherein said first cavity has a height of from about one-quarter to one-half the length of said foam core and

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- a width or from about one-fourth to about three-quarters the width of said
  foam core.
- 1 17. The combination, as set forth in claim 14, wherein said first cavity has a height of from about 4 inches (10 cm) to about 12 inches (30.5 cm) and a
- 3 width of from about 4 inches (10 cm) to about 12 inches (30.5 cm).
- 1 18. The combination, as set forth in claim 15, wherein said second cavity is dimensioned to fit the root ball of a plant transplanted therein.
- 1 19. The combination, as set forth in claim 14, wherein said foam core is selected 2 from the group consisting of hydrophilic polymer foams.
- 1 20. The combination, as set forth in claim 14, wherein said coating is selected 2 from the group consisting of epoxies, polyurethanes and phenolic resins.